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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,862	05/23/2001	Timothy E. Pearcy	12784.2US01	2070
23552	7590 03/10/2004		EXAMINER	
	NT & GOULD PC		LU, JIPING	
P.O. BOX 29 MINNEAPO	LIS, MN 55402-0903		ART UNIT	PAPER NUMBER
	•		3749	/
,			DATE MAILED: 03/10/2004	$^{\cdot}$ Q

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	,00			
	09/864,862	PEARCY ET AL.	\			
Office Action Summary	Examiner	Art Unit				
	Jiping Lu	3749				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet	with the correspondence add	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may y within the statutory minimum of t vill apply and will expire SIX (6) M , cause the application to become	a reply be timely filed hirty (30) days will be considered timely ONTHS from the mailing date of this co ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	action is non-final.					
3) Since this application is in condition for allowar						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
 5) ☐ Claim(s) is/are allowed. 6) ☒ Claim(s) 1.2.4 and 5 is/are rejected. 7) ☒ Claim(s) 3 is/are objected to. 	 ✓ Claim(s) 1-7 is/are pending in the application. 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration. ☐ Claim(s) is/are allowed. ✓ Claim(s) 1,2,4 and 5 is/are rejected. 					
Application Papers						
9) The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
	taminer. Note the attach	led Office Action or form P1	O-152.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in rity documents have bee u (PCT Rule 17.2(a)).	Application No en received in this National	Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5.	Paper N	v Summary (PTO-413) o(s)/Mail Date f Informal Patent Application (PTO	·-152)			

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DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention: Species I, claims 1-5; Species II, claims 6-7.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention. During a telephone

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conversation with Gregory A. Sebald on 3/3/2004, a provisional election was made with traverse to prosecute the invention of Species I, claims 1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-7 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

4. The disclosure is objected to because of the following informalities: specification, page 11, lines 6 and 8, the reference numeral of chamber should be 22 not 20.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-2 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Copson (U. S. Pat. 2,859,534) in view of Gross et al. (U. s. pat. 5,135,122).

Copson shows a method of lyophilizing material 13 comprising the steps of placing material to be processed in a chamber 10, creating a microwave field in the chamber, passing the water vapor through a condenser 18 and stirring the microwave (via stirrer 10a). However, Copson does not teach the step of controlling the microwave power in response to the temperature measurements in the chamber. Gross et al. teach a product drying method of controlling microwave power (428) in response to the temperature measurements (by sensor 426) in the chamber 410 same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the method of Copson with a step of controlling the microwave power in response to the drying chamber temperature in order to improve the drying efficiency.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Copson (U. S. Pat. 2,859,534) in view of Gross et al. (U. s. pat. 5,135,122) as applied to claim 1 above, and further in view of Takahashi (U. S. Pat. 4,764,102).

The drying method of Copson as modified by Gross et al. as above includes all that is recited in claim 5 except for the step of shielding selected surfaces in the chamber from direct

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exposure to microwaves. Takahashi teaches a drying method with a step of shielding the selected surfaces (809) in the chamber (803) from direct exposure to microwaves (see Fig. 26) same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further provide the method of Copson with a step of shielding the selected surfaces in the chamber from direct exposure to microwaves as taught by Takahashi in order to obtain the uniform drying.

Allowable Subject Matter

9. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 703-308-2354. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703 308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jiping Lu Primary Examiner Art Unit 3749

J. L.